

REMARKS

Claims 1-9 are pending in this case. Claims 1-8 have been rejected.

Independent claims 1, 4, and 8, have been amended to recite that the polyester resin composition contains a thermoplastic polyester resin and layered phyllosilicate without a silane compound. Support for these amendments appears in the specification, for example, on page 14, lines 16-17, and page 30, line 20. No new matter has been added.

Claim 9 has been added to require that the layered phyllosilicate comprises a dispersion comprising layered phyllosilicate and water. Support for new claim 9 appears throughout the specification, Examples, and claims, as originally filed. No new matter has been added.

The specification has been amended to delete Comparative Example 9 because it is identical to Comparative Example 11 appearing on page 72 of the specification.

In view of the claims as amended and the remarks set forth below, further and favorable consideration is respectfully requested.

I. At page 2, paragraph 2, of the Office Action, claims 1-8 have been rejected under 35 USC § 102 (b) as being anticipated by Matayabas (WO 98/29499).

The Examiner states that Matayabas teaches a polyester/platelet composition where the amount of clay, particle diameter and width, aspect ratio, and IV, fall within the presently claimed ranges.

The Examiner states that Matayabas does not expressly teach the ratio claimed in present claim 1 (a), or other "limitations", but that these limitations would be inherent because Matayabas

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teaches a process where the pressure, extruder speed and temperature, are encompassed by the present invention.

Matayabas teaches producing a polyester/platelet nanocomposite where the platelets include natural and synthetic clays and materials, including mica and smectite.

In view of the following, this rejection is respectfully traversed.

Claims 1, 4, and 8, have been amended to exclude a silane compound from the present resin composition.

The present resin composition is prepared by mixing a component having a low degree of polymerization with a dispersion of layered phyllosilicate and water, and then polymerizing the mixture. As described on page 37, lines 2-9, of the present specification, when a dispersion of layered phyllosilicate in water is prepared, the layered phyllosilicate becomes swollen and the layers separate to almost a unit layer state. In addition, when polymerizing, the layered phyllosilicate dispersed to a unit layer state, the dispersion can be maintained without modification. The presently claimed resin composition fulfilling parameters (a) to (i) can be produced only by the foregoing process, as evidenced by the Comparative Examples set forth in the specification and discussed below.

In Comparative Example 4, set forth in the present specification, the component having a low degree of polymerization was mixed with the layered phyllosilicate alone, i.e., the phyllosilicate was not dispersed in water, and therefore did not swell and separate to an almost unit layer state. The composition obtained in absence of a water dispersion, did not fulfill any of the parameters (a) to (c) of claim 1, nor any of parameters (g) to (i) of claim 4.

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As in Comparative Example 4, Matayabas discloses mixing layered phyllosilicate with a component having a low degree of polymerization, in powder form. As in the case of Comparative Example 4, the Matayabas resin composition produced does not fulfill any of the parameters (a) to (c) of claim 1, nor any of parameters (g) to (i) of claim 4, because the layered phyllosilicate is not dispersed in water, i.e., water is absent when the component having a low degree of polymerization and the layered phyllosilicate, are mixed. Thus, in the absence of water, the layered phyllosilicate does not swell and separate to an almost unit layer state, as presently required in order to achieve the claimed parameters.

In view of the above, the present resin composition is different from Matayabas, and exhibits excellent heat resistance and modulus.

Regarding process claim 8, Matayabas does not teach or suggest a process where a component having a low degree of polymerization is mixed with a dispersion of layered phyllosilicate and water, as required by present claim 8.

In view of the foregoing, it is submitted that Matayabas does not teach each and every element of the claimed invention as required for anticipation under 35 USC §102. Accordingly, it is submitted that claims 1-8 are novel in view of Matayabas. Thus, the Examiner is respectfully requested to withdraw this rejection.

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II. At page 4, paragraph 3, of the Office Action, claims 1-8 have been rejected under 35 USC § 102 (b) as being anticipated by Suzuki (JP 11-71509).

Suzuki discloses preparing silane-clay composites, where silane is introduced into swellable silicate salts.

In view of the following, this rejection is believed to be overcome.

Independent claims 1, 4, and 8, have been amended to exclude a silane compound from the resin composition. Support for this amendment appears in the present specification on pages 14 and 30. No new matter has been added.

Suzuki does not teach a composition absent a silane compound.

Thus, Suzuki does not teach each and every element of the claimed invention, as required for anticipation under 35 USC §102. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

III. At page 6, paragraph 7, of the Office Action, claim 7 has been rejected under 35 USC § 103(a) as being unpatentable over Matayabas in view of Ohara (JP 9-143359)

The Examiner states that it would be obvious to utilize a combination of the polycarbonate and the polyester of Ohara, in order to form the nanocomposite of Matayabas and thereby obtain the claimed invention.

Ohara teaches a composition including a polycarbonate resin, a polyester resin, and a silicate compound, and teaches that the composition can include organic onium ions. Matayabas teaches that blending clay with preformed polyesters is not desirable.

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In view of the following, this rejection is believed to be overcome.

Present claim 7 is dependent on claim 1. Claim 1 requires a resin composition which achieves the claimed parameters, which claimed parameters are not achieved by Matayabas because Matayabas does not teach or suggest a resin composition prepared by mixing a component having a low degree of polymerization with a water dispersion of a layered phyllosilicate. This is evidenced as discussed above, and as set forth in Comparative Example 4 of the present specification, and in Matayabas.

Ohara does not cure the deficiencies of Matayabas, since Ohara does not teach or suggest a resin composition containing a mixture of a component having a low degree of polymerization with a water dispersion of layered phyllosilicate, to achieve the presently claimed parameters.

In view of the above, and the claims as amended, it is submitted that nothing in Matayabas or Ohara, taken alone or together, render the claimed invention obvious within the meaning of 35 USC §103. Thus, the Examiner is respectfully requested to withdraw this rejection.

In view of the aforementioned amendments and accompanying remarks, claims 1, 4 and 8, as amended, are in condition for allowance, which action, at an early date, is requested.

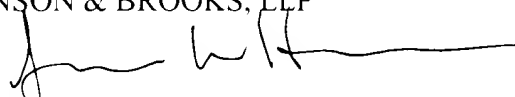
If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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